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2 **CLAIMS**

3 **1.** A computer-implemented method for processing data, the method
4 comprising:

5 in an operating environment supporting a pipeline of a plurality of object-
6 based commands, a subsequent command within the pipeline being configured to
7 communicate with a prior command within the pipeline through a parseable object
8 emitted from the prior command, the operating environment configured to support
9 the execution of the commands within the same process,

10 receiving the parseable object emitted from the prior command;

11 obtaining a data type for the parseable object;

12 obtaining format information describing a format for the data type; and

13 emitting a format object for access by another subsequent command, the
14 format object being based on the format information.

15 **2.** The computer-implemented method of claim 1, wherein obtaining
16 format information comprises accessing an XML-based document.

17 **3.** The computer-implemented method of claim 1, wherein the
18 subsequent command comprises an output command configured to render results
19 of the pipeline based on the received parseable object and the format object.

20 **4.** The computer-implemented method of claim 3, wherein the rendering
21 of the results comprises displaying on a console.

22 **5.** The computer-implemented method of claim 3, wherein the rendering
23 of the results comprises importing the results into an application.

24 **6.** The computer-implemented method of claim 3, wherein the rendering
25 of the results comprises displaying in a graphical user interface.

1 7. The computer-implemented method of claim 1, wherein the other
2 subsequent command comprises a markup command configured to add property
3 annotation to selected parameters within the parseable object and emitting these
4 property annotations for input by further subsequent commands in the pipeline.

5 8. The computer-implemented method of claim 1, wherein the other
6 subsequent command comprises a convert command configured to convert the
7 received parseable stream into a specific format.

8 9. The computer-implemented method of claim 8, wherein the specific
9 format comprises an XML document, an Active Directory Object, or a comma
10 separated value format.

11 10. The computer-implemented method of claim 8, wherein another
12 subsequent command comprises a transform command that receives the specific
13 format from the convert command and transforms the specific format into another
14 specific format based on a style sheet.

15 11. The computer-implemented method of claim 1, wherein the format
16 information describes the data type and at least one of a shape, a property, or a
17 header.

18 12. A computer readable medium having computer-executable
19 instructions for providing data driven output, the instructions comprising:

20 receiving a parseable object emitted from a prior command within an
21 operating environment that supports a pipeline of a plurality of object-based
22 commands and that is configured to support the execution of the commands within
23 the same process, the prior command being one of the plurality of commands,

24 obtaining a data type for the parseable object;

25 obtaining format information describing a format for the data type; and

1 emitting a format object for access by a subsequent command from the
2 plurality of commands, the format object being based on the format information.

3 13. The computer readable medium of claim 12, wherein obtaining
4 format information comprises accessing an XML-based document.

5 14. The computer readable medium of claim 12, wherein the subsequent
6 command comprises an output command configured to render results of the
7 pipeline based on the received parseable object and the format object

8 15. The computer readable medium of claim 12, wherein the other
9 subsequent command comprises a markup command configured to add property
10 annotation to selected parameters within the parseable object and emitting these
11 property annotations for input by further subsequent commands in the pipeline.

12 16. The computer readable medium of claim 12, wherein the other
13 subsequent command comprises a convert command configured to convert the
14 received parseable stream into a specific format.

15 17. The computer readable medium of claim 16, wherein the specific
16 format comprises an XML document, an Active Directory Object, or a comma
17 separated value format.

18 18. The computer readable medium of claim 16, wherein another
19 subsequent command comprises a transform command that receives the specific
20 format from the convert command and transforms the specific format into another
21 specific format based on a style sheet.

22 19. The computer readable medium of claim 12, wherein the format
23 information describes the data type and at least one of a shape, a property, or a
24 header.

25 20. A system that supports data driven output, the system comprising:

1 a processor;
2 a memory, the memory being allocated for a plurality of computer-
3 executable instructions which are loaded into the memory for execution by the
4 processor, the computer-executable instructions performing a method comprising:
5 receiving a parseable object emitted from a prior command within an
6 operating environment that supports a pipeline of a plurality of object-based
7 commands and that is configured to support the execution of the commands within
8 the same process, the prior command being one of the plurality of commands,
9 obtaining a data type for the parseable object;
10 obtaining format information describing a format for the data type; and
11 emitting a format object for access by a subsequent command from the
12 plurality of commands, the format object being based on the format information.
13

14 21. The system of claim 20, wherein obtaining format information
15 comprises accessing an XML-based document.

16 22. The The system of claim 20, wherein the format information
17 describes the data type and at least one of a shape, a property, or a header.

18 23. The The system of claim 20, wherein the other subsequent
19 command comprises a markup command configured to add property annotation to
20 selected parameters within the parseable object and emitting these property
21 annotations for input by further subsequent commands in the pipeline.

22 24. The system of claim 20, wherein the other subsequent command
23 comprises a convert command configured to convert the received parseable stream
24 into a specific format.
25

1 25. The system of claim 20, wherein another subsequent command
2 comprises a transform command that receives the specific format from the convert
3 command and transforms the specific format into another specific format based on
4 a style sheet.